# Jahar Bhattacharya

List of Publications by Year
in descending order



| 97 | 6,988 | 81839 39 | 110317 64 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 102 | 102 | 102 | 9361 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Mitochondrial transfer from bone-marrowâ€“derived stromal cells to pulmonary alveoli protects against acute lung injury. Nature Medicine, 2012, 18, 759-765. | 15.2 | 1,164 |
| 2 | Efficient generation of lung and airway epithelial cells from human pluripotent stem cells. Nature Biotechnology, 2014, 32, 84-91. | 9.4 | 497 |
| 3 | Future Research Directions in Acute Lung Injury. American Journal of Respiratory and Critical Care Medicine, 2003, 167, 1027-1035. | 2.5 | 489 |
| 4 | A three-dimensional model of human lung development and disease from pluripotent stem cells. Nature Cell Biology, 2017, 19, 542-549. | 4.6 | 467 |
| 5 | Sessile alveolar macrophages communicate with alveolar epithelium to modulate immunity. Nature, 2014, 506, 503-506. | 13.7 | 349 |
| 6 | Concentration-dependent inhibition of angiogenesis by mesenchymal stem cells. Blood, 2009, 113, 4197-4205. | 0.6 | 298 |
| 7 | Regulatory T Cells Promote Macrophage Efferocytosis during Inflammation Resolution. Immunity, 2018, 49, 666-677.e6. | 6.6 | 270 |
| 8 | Regulation and Repair of the Alveolar-Capillary Barrier in Acute Lung Injury. Annual Review of Physiology, 2013, 75, 593-615. | 5.6 | 266 |
| 9 | Mechanisms regulating endothelial cell barrier function. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2000, 279, L419-L422. | 1.3 | 206 |
| 10 | Mitochondria in lung biology and pathology: more than just a powerhouse. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2014, 306, L962-L974. | 1.3 | 158 |
| 11 | Connexin 43 mediates spread of Ca2+ -dependent proinflammatory responses in lung capillaries. Journal of Clinical Investigation, 2006, 116, 2193-2200. | 3.9 | 142 |
| 12 | Pulmonary vascular endothelium: the orchestra conductor in respiratory diseases. European Respiratory Journal, 2018, 51, 1700745. | 3.1 | 136 |
| 13 | [Ca<sup>2+</sup>]<sub>i</sub> oscillations regulate type II cell exocytosis in the pulmonary alveolus. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2000, 279, L5-L13. | 1.3 | 130 |
| 14 | Pressure is proinflammatory in lung venular capillaries. Journal of Clinical Investigation, 1999, 104, 495-502. | 3.9 | 128 |
| 15 | Mechano-oxidative coupling by mitochondria induces proinflammatory responses in lung venular capillaries. Journal of Clinical Investigation, 2003, 111, 691-699. | 3.9 | 120 |
| 16 | Alveolar expansion imaged by optical sectioning microscopy. Journal of Applied Physiology, 2007, 103, 1037-1044. | 1.2 | 111 |
| 17 | Micromechanics of Alveolar Edema. American Journal of Respiratory Cell and Molecular Biology, 2011, 44, 34-39. | 1.4 | 108 |
| 18 | Red blood cells induce hypoxic lung inflammation. Blood, 2008, 111, 5205-5214. | 0.6 | 101 |

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|---|---|---|---|
| 19 | Migration of Fibrocytes in Fibrogenic Liver Injury. American Journal of Pathology, 2011, 179, 189-198. | 1.9 | 97 |
| 20 | Ca<sup>2+</sup>Waves in Lung Capillary Endothelium. Circulation Research, 1996, 79, 898-908. | 2.0 | 94 |
| 21 | A novel signaling mechanism between gas and blood compartments of the lung. Journal of Clinical Investigation, 2000, 105, 905-913. | 3.9 | 93 |
| 22 | Activation of TNFR1 ectodomain shedding by mitochondrial Ca2+ determines the severity of inflammation in mouse lung microvessels. Journal of Clinical Investigation, 2011, 121, 1986-1999. | 3.9 | 89 |
| 23 | Strategic Plan for Lung Vascular Research. American Journal of Respiratory and Critical Care Medicine, 2010, 182, 1554-1562. | 2.5 | 73 |
| 24 | Endothelial Barrier Strengthening by Activation of Focal Adhesion Kinase. Journal of Biological Chemistry, 2003, 278, 13342-13349. | 1.6 | 72 |
| 25 | Intercellular mitochondrial transfer: bioenergetic crosstalk between cells. Current Opinion in Genetics and Development, 2016, 38, 97-101. | 1.5 | 70 |
| 26 | Macrophage-epithelial interactions in pulmonary alveoli. Seminars in Immunopathology, 2016, 38, 461-469. | 2.8 | 69 |
| 27 | Soluble Ligands of the Î±vÎ²4 Integrin Mediate Enhanced Tyrosine Phosphorylation of Multiple Proteins in Adherent Bovine Pulmonary Artery Endothelial Cells. Journal of Biological Chemistry, 1995, 270, 16781-16787. | 1.6 | 67 |
| 28 | Ongoing angiogenesis in blood vessels of the abdominal aortic aneurysm. Experimental and Molecular Medicine, 2004, 36, 524-533. | 3.2 | 66 |
| 29 | Pressure-induced endothelial Ca2+ oscillations in lung capillaries. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2002, 282, L917-L923. | 1.3 | 64 |
| 30 | When Cells Become Organelle Donors. Physiology, 2013, 28, 414-422. | 1.6 | 64 |
| 31 | Chloride-Dependent Secretion of Alveolar Wall Liquid Determined by Optical-Sectioning Microscopy. American Journal of Respiratory Cell and Molecular Biology, 2007, 36, 688-696. | 1.4 | 61 |
| 32 | Real-time lung microscopy. Journal of Applied Physiology, 2007, 102, 1255-1264. | 1.2 | 60 |
| 33 | Live Imaging of the Lung. Annual Review of Physiology, 2014, 76, 431-445. | 5.6 | 59 |
| 34 | Atomic force microscope elastography reveals phenotypic differences in alveolar cell stiffness. Journal of Applied Physiology, 2008, 105, 652-661. | 1.2 | 57 |
| 35 | Mitochondrial Reactive Oxygen Species Regulate Spatial Profile of Proinflammatory Responses in Lung Venular Capillaries. Journal of Immunology, 2002, 169, 7078-7086. | 0.4 | 55 |
| 36 | Hyperosmolarity enhances the lung capillary barrier. Journal of Clinical Investigation, 2003, 112, 1541-1549. | 3.9 | 54 |

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|---|---|---|---|
| 37 | Modulation of the NLRP3 inflammasome by Sars-CoV-2 Envelope protein. Scientific Reports, 2021, 11, 24432. | 1.6 | 51 |
| 38 | Ligation of Endothelial Î±<sub>v</sub>Î²<sub>3</sub>Integrin Increases Capillary Hydraulic Conductivity of Rat Lung. Circulation Research, 1995, 77, 651-659. | 2.0 | 50 |
| 39 | High Tidal Volume Ventilation Induces Proinflammatory Signaling in Rat Lung Endothelium. American Journal of Respiratory Cell and Molecular Biology, 2003, 28, 218-224. | 1.4 | 44 |
| 40 | Disruption of staphylococcal aggregation protects against lethal lung injury. Journal of Clinical Investigation, 2018, 128, 1074-1086. | 3.9 | 39 |
| 41 | Î± v Î² 3 Integrin Induces Tyrosine Phosphorylationâ€“Dependent Ca 2+ Influx in Pulmonary Endothelial Cells. Circulation Research, 2000, 86, 456-462. | 2.0 | 35 |
| 42 | Inhibition of Acid-induced Lung Injury by Hyperosmolar Sucrose in Rats. American Journal of Respiratory and Critical Care Medicine, 2005, 172, 1002-1007. | 2.5 | 34 |
| 43 | Pulmonary surfactant and drug delivery: Vehiculization, release and targeting of surfactant/tacrolimus formulations. Journal of Controlled Release, 2021, 329, 205-222. | 4.8 | 34 |
| 44 | Molecular programs of fibrotic change in aging human lung. Nature Communications, 2021, 12, 6309. | 5.8 | 33 |
| 45 | Paracrine purinergic signaling determines lung endothelial nitric oxide production. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2009, 296, L901-L910. | 1.3 | 30 |
| 46 | Cell Therapy for Lung Diseases. Report from an NIHâ€“NHLBI Workshop, November 13â€“14, 2012. American Journal of Respiratory and Critical Care Medicine, 2013, 188, 370-375. | 2.5 | 29 |
| 47 | Pressure-induced leukocyte margination in lung postcapillary venules. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2005, 289, L407-L412. | 1.3 | 28 |
| 48 | Hypercapnia attenuates ventilatorâ€induced lung injury via a disintegrin and metalloproteaseâ€17. Journal of Physiology, 2014, 592, 4507-4521. | 1.3 | 24 |
| 49 | Erythrocytes Induce Proinflammatory Endothelial Activation in Hypoxia. American Journal of Respiratory Cell and Molecular Biology, 2013, 48, 78-86. | 1.4 | 23 |
| 50 | F-actin scaffold stabilizes lamellar bodies during surfactant secretion. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2014, 306, L50-L57. | 1.3 | 23 |
| 51 | Microvascular pressures in the isolated, perfused dog lung: Comparison between theory and measurement. Microvascular Research, 1982, 23, 67-76. | 1.1 | 13 |
| 52 | Platelets induce endothelial tissue factor expression in a mouse model of acid-induced lung injury. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2012, 302, L1209-L1220. | 1.3 | 13 |
| 53 | Interpreting the lung microvascular filtration coefficient. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2007, 293, L9-L10. | 1.3 | 11 |
| 54 | Cadherin selectivity filter regulates endothelial sieving properties. Nature Communications, 2012, 3, 1099. | 5.8 | 11 |

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|---|---|---|---|
| 55 | FACTORS AFFECTING LUNG MICROVASCULAR PRESSURE. Annals of the New York Academy of Sciences, 1982, 384, 107-114. | 1.8 | 10 |
| 56 | ITF1697, a Stable Lys-Pro-Containing Peptide, Inhibits Weibel-Palade Body Exocytosis Induced by Ischemia/Reperfusion and Pressure Elevation. Molecular Medicine, 2007, 13, 615-624. | 1.9 | 8 |
| 57 | Lung Injury. American Journal of Respiratory and Critical Care Medicine, 2004, 170, 928-929. | 2.5 | 7 |
| 58 | Localized Acid Instillation by a Wedgedâ€Catheter Method Reveals a Role for Vascular Gap Junctions in Spatial Expansion of Acid Injury. Anatomical Record, 2011, 294, 1585-1591. | 0.8 | 7 |
| 59 | Actin fence therapy with exogenous V12Rac1 protects against acute lung injury. JCI Insight, 2021, 6, . | 2.3 | 7 |
| 60 | Gene Therapy for Pulmonary Edema. American Journal of Respiratory Cell and Molecular Biology, 2000, 22, 640-641. | 1.4 | 4 |
| 61 | Lung capillaries raise the hypoxia alarm. Journal of Clinical Investigation, 2012, 122, 3845-3847. | 3.9 | 3 |
| 62 | PREVALENCE AND RISK FACTORS OF LEFT VENTRICULAR DIASTOLIC DYSFUNCTION IN COPD PATIENTS. Chest, 2005, 128, 263S. | 0.4 | 2 |
| 63 | Higher estimate of lung microvascular fluid production. Acta Physiologica, 2006, 188, 75-75. | 1.8 | 2 |
| 64 | ATP induces alveolar/capillary cross talk in the lung. FASEB Journal, 2006, 20, LB40. | 0.2 | 0 |
| 65 | Capillary Ca <sup>2+</sup> increase induces venular Pâ€selectin expression in lung. FASEB Journal, 2006, 20, A752. | 0.2 | 0 |
| 66 | Ca 2+ communication through connexin 43 in lung capillaries. FASEB Journal, 2006, 20, A275. | 0.2 | 0 |
| 67 | Hyperosmolar sucrose protects against acidâ€induced lung injury in awake rats. FASEB Journal, 2006, 20, LB40. | 0.2 | 0 |
| 68 | Mitochondrial ROS regulate surfactant secretion in pulmonary alveoli. FASEB Journal, 2006, 20, . | 0.2 | 0 |
| 69 | Lung endothelial barrier restoration by interactions of Î²â€catenin and focal adhesion kinase. FASEB Journal, 2006, 20, A752. | 0.2 | 0 |
| 70 | Red blood cells induce lung inflammation in hypoxia. FASEB Journal, 2007, 21, A1204. | 0.2 | 0 |
| 71 | Bone marrow stromal cells cause collapse of neocapillary networks in vitro. FASEB Journal, 2007, 21, A1427. | 0.2 | 0 |
| 72 | Hyperosmolar sucrose treatment of acidâ€induced lung injury in FRNKâ€transfected mice. FASEB Journal, 2007, 21, A555. | 0.2 | 0 |

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|---|---|---|---|
| 73 | Impaired mitochondrial Ca2+ dynamics in lipopolysaccharideâ€treated lungs. FASEB Journal, 2007, 21, A550. | 0.2 | 0 |
| 74 | Tissue conduction of acidâ€induced lung injury. FASEB Journal, 2007, 21, A555. | 0.2 | 0 |
| 75 | Quantification of lung microvascular permeability by twoâ€photon microscopy. FASEB Journal, 2007, 21, A554. | 0.2 | 0 |
| 76 | Profile of Eâ€cadherin mobility in the endothelial junction. FASEB Journal, 2008, 22, 964.33. | 0.2 | 0 |
| 77 | Focal actin tethering regulates Eâ€cadherin mobility in lung microvascular endothelial cells. FASEB Journal, 2009, 23, 964.5. | 0.2 | 0 |
| 78 | Lung microvascular mitochondria regulate TNFÎ±â€induced TNFR1 shedding. FASEB Journal, 2009, 23, 1023.6. | 0.2 | 0 |
| 79 | Mitochondria determine TNFÎ± receptor distribution in lung microvessels. FASEB Journal, 2009, 23, 594.20. | 0.2 | 0 |
| 80 | Red blood cellâ€induced proinflammatory lung endothelial signaling in hypoxia. FASEB Journal, 2009, 23, 1023.4. | 0.2 | 0 |
| 81 | Endothelial TNFR1 shedding by mitochondria. FASEB Journal, 2010, 24, 777.9. | 0.2 | 0 |
| 82 | TNFR1 shedding by mitochondrial RISP in lung microvascular endothelium. FASEB Journal, 2010, 24, 797.8. | 0.2 | 0 |
| 83 | Actin tethering in endothelial junctions. FASEB Journal, 2010, 24, 598.10. | 0.2 | 0 |
| 84 | Eâ€cadherin ectodomains determine protein sieving properties of the endothelial barrier. FASEB Journal, 2011, 25, 1101.4. | 0.2 | 0 |
| 85 | Alveolar acid transiently permeabilizes the alveolar epithelium in mouse lungs. FASEB Journal, 2011, 25, 865.7. | 0.2 | 0 |
| 86 | Motility of alveolar mitochondria. FASEB Journal, 2011, 25, 865.8. | 0.2 | 0 |
| 87 | Intracellular delivery of activated focal adhesion kinase â€a novel therapeutic strategy for acute lung injury. FASEB Journal, 2011, 25, 1101.6. | 0.2 | 0 |
| 88 | First detection of Ca 2+ responses in alveolar macrophages in situ. FASEB Journal, 2012, 26, 1063.16. | 0.2 | 0 |
| 89 | Cadherin ectodomains and cadherinâ€actin linkages regulate the endothelial barrier. FASEB Journal, 2012, 26, 1063.3. | 0.2 | 0 |
| 90 | First determination of ATP in alveolar epithelium in situ , effect of mesenchymal stem cells. FASEB Journal, 2012, 26, 1063.15. | 0.2 | 0 |

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| 91 | Cellâ€specific expression of alveolar TNFR1. FASEB Journal, 2012, 26, 1063.14. | 0.2 | 0 |
| 92 | Synchronized activation of alveolar macrophages determined by live alveolar imaging. FASEB Journal, 2013, 27, 914.5. | 0.2 | 0 |
| 93 | A Potential Role for Regulatory T Cells in Apoptotic Cell Clearance by Macrophages in a Murine Model of Acute Lung Injury. FASEB Journal, 2015, 29, 148.3. | 0.2 | 0 |
| 94 | Intravascular Delivery of TATâ€conjugated Focal Adhesion Kinase Protects against Acute Lung Injury. FASEB Journal, 2019, 33, 846.2. | 0.2 | 0 |
| 95 | Optical Determination of Ageâ€Related Changes in Subpleural Collagen of Live Human Lungs. FASEB Journal, 2020, 34, 1-1. | 0.2 | 0 |
| 96 | Oxidative Crosstalk with Venular Capillary Mitochondria Mediates Barrier Failure in Acute Lung Injury. FASEB Journal, 2022, 36, . | 0.2 | 0 |
| 97 | Alveolar Responses to Influenza Lung Infection Determined by Confocal Imaging of Live Lungs. FASEB Journal, 2022, 36, . | 0.2 | 0 |